### SUBSITUTE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

#### 5 TITLE OF THE INVENTION:

Nectarine Tree 'S 6816'

#### **CROSS REFERENCE TO RELATED APPLICATIONS:**

None

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#### PRIORITY CLAIM:

This application claims priority of U.S. Provisional patent application Ser. No. 60/404,217 filed August 15, 2002.

## 15 STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT:

None

#### LATIN NAME OF THE GENUS AND SPECIES OF THE PLANT CLAIMED:

20 Prunus persica L. Batsch.

#### VARIETY DENOMINATION:

'S 6816'

#### BACKGROUND OF THE INVENTION

The new nectarine tree 'S 6816' was developed by the Institut National de la Recherche

Agronomique (INRA) at Angers, France, as part of a controlled breeding program. 'S 6816' was

asexually propagated by budding at Angers, France, and has been observed to remain true to type

over successive asexually propagated generations.

#### **BRIEF SUMMARY OF THE INVENTION**

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'S 6816' was selected for its suitability as a commercial nectarine tree cultivar. Fruit of the 'S 6816' cultivar matures in late July in central Washington state, and is notable for its aromatic and sweet yellow flesh. This variety is distinguishable over related variety 'S 6817' (U.S. Patent Application Ser. No. 10/642,441) by its earlier maturity date and smaller and sweeter fruit.

#### **BRIEF DESCRIPTION OF THE PHOTOGRAPHS:**

- The photograph shows the fruit of the new cultivar.
  - FIG. 1 shows branches and blossoms of the new cultivar;
  - FIG. 2 shows a tree of the new cultivar;
  - FIG. 3 shows leaves of the new cultivar;
  - FIG. 4 shows a leaf, a stone, and a portion of a fruit of the new cultivar;
- FIG. 5 shows fruit of the new cultivar; and
  - FIG. 6 shows a sectioned fruit of the new cultivar.

#### DETAILED BOTANICAL DESCRIPTION OF THE VARIETY:

The new nectarine tree 'S 6816' was developed as part of a controlled breeding program.

The new nectarine tree has been observed to remain true to type over successive asexually propagated generations.

The following is a detailed botanical description of 'S 6816,' a new and distinct nectarine tree, based on observations made during the 2004 growing season, of specimens planted at Parker, Washington, USA, in 1999. The described trees were grown on 'Lovell' (not patented) rootstock. All colors are described according to the Royal Horticultural Society Color Chart. It should be understood that the botanical and analytical characteristics described will vary somewhat depending upon cultural practices and climatic conditions, and can vary with location and season. Quantified measurements are expressed as an average of measurements taken from a number of individual plants of the new variety. The measurements of any individual plant, or any group of plants, of the new variety may vary from the stated average.

#### 15 Tree

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|    | Size     | Large, width 2.2 m wide, height 3.4 m                    |
|----|----------|--|
|    | Vigor    | Strong   |
|    | Habit    | Upright  |
|    | Trunk    | Diameter 31 cm at soil level; very rough; overcolor grey |
| 20 |          | 201D; undercolor grey 175A; lenticels prominent, 0.3 to  |
|    | •        | 0.5 cm, yellow 159A                                      |
|    | Branches | Smooth, greyed red 181A, internode length 3.1 to 3.8 cm, |

# lateral branch diameter 1.8 cm, length 46.2 cm (previous season growth)

## Leaves

|    | Young shoot - length of stipule Medium |   |  |
|----|--|---|--|
| 5  | Length                                 | - Long  |  |
|    | Width                                  | - Medium  |  |
|    | Size                                   | Length 10.5 cm; 4.0 cm                                    |  |
|    | Ratio length to width                  | Medium  |  |
|    | Shape                                  | Lanceolate, base rounded, apex acuminate, recurved, cross |  |
| 10 |  | section concave   |  |
|    | Shape in cross section                 | Concave   |  |
|    | Recurvature of apex                    | Present   |  |
|    | Angle at base                          | Acute   |  |
|    | Angle at apex                          | - Large   |  |
| 15 | Color                                  | Upper surface green 146A, lower surface green N144A,      |  |
|    |  | upper venation color green 154D                           |  |
|    | Texture                                | Smooth  |  |
|    | Margin                                 | Serrate to serrulate                                      |  |
| ]  | Petiole                                |   |  |
| 20 | Length                                 | Short   |  |
|    | Size                                   | Length 1.5 cm, diameter 0.2 cm                            |  |
|    | Color                                  | Green 154D  |  |

|    | Nectaries                | Present   |  |  |
|----|--------------------------|---|--|--|
|    | Shape of nectaries       | Reniform  |  |  |
|    | Predominant number of ne | Predominant number of nectaries - Two                       |  |  |
|    | Glands                   | Present, usually 2, reniform                                |  |  |
| 5  | <u>Flowers</u>           |   |  |  |
|    | Bud                      | Length 0.9 to 1.1 cm, round, smooth, hardy, red-purple 59A, |  |  |
|    |                          | tip pink 62A  |  |  |
|    | Bud burst                | March 18 at Parker, Washington                              |  |  |
|    | Bloom period             | March 18 to April 7 at Parker, Washington                   |  |  |
| 10 | Flower type              | Showy, fragrant, 1 to 4 per cluster                         |  |  |
|    | Petals                   | Quantity 5; length 1.8 to 2.1 cm, width 1.3 to 1.5 cm;      |  |  |
|    |                          | margins ruffled, overlapping; shape obovate to rotund;      |  |  |
|    |                          | color pink 69A  |  |  |
|    | Sepals                   | Length 0.5 to 0.6 cm; width 0.4 to 0.5 cm; color red-purple |  |  |
| 15 |                          | <u>59A</u>  |  |  |
|    | Flower size              | Diameter 3.5 to 3.7 cm                                      |  |  |
|    | Reproductive organs      | Staymen white 155D, quantity 39, length 1.0 to 1.3 cm;      |  |  |
|    |                          | anther length 0.5 cm, brown 199A; filament 0.9 to 1.2 cm;   |  |  |
|    |                          | pistil 0.9 to 1.0 cm, smooth, yellow 3A                     |  |  |
| 20 | Pollen                   | Scarce, yellow 1A   |  |  |
|    | Fruit                    |   |  |  |
|    | Size                     | Small, diameter 70 mm, height 4.0 cm                        |  |  |

Shape (ventral view)

Broad oblate

Shape of pistil end

Weakly depressed

Symmetry

Symmetric

Prominence of suture

Weak

5 Depth of stalk cavity Shallow, 0.5 cm

Width of stalk cavity

Broad, 2.8 cm

Skin

Color: ground color orange-red 34C, over color red-purple

59A; thin, smooth, tenacious

Ground color Orange yellow

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Over color Present

Hue of over color

Medium red

Pattern of over color

Solid flush

Extent of over color

Large

Pubescence

Absent

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Thickness of skin -Medium

Adherence of skin to flesh Strong

Firmness of flesh

Soft

Ground color of flesh

Orange yellow-orange 17C

Anthocyanin coloration directly under skin Absent or very weakly expressed

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Anthocyanin coloration of flesh

Absent or very weakly expressed

Anthocyanin coloration around stone Absent or very weakly expressed

Texture of flesh

Not fibrous

Sweetness

High Very sweet, 12° Brix

Acidity

Low

Stone

Size

Small, diameter 3.0 cm

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Shape in lateral view

Oblate

Intensity of brown color

Medium

Red-purple 59C

Relief of surface

Small pits, ridges

Tendency of splitting at peak harvest Absent or very low

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Adherence to flesh

Absent (freestone)

Time of maturity for consumption Early, late July in Parker, Washington

Tendency to preharvest drop

Absent or very weak

Resistance to diseases and pests

None observed

Heat and cold tolerance

Tolerant in area tested (USDA Zone 6)

#### **ABSTRACT**

A new cultivar of nectarine tree (*Prunus persica* L. Batsch) named 'S 6816' is disclosed.

The fruit of 'S 6816' is oblate, yellow fleshed, and freestone, and is notable for its early maturity and very sweet flavor.

## **CLAIM**

We claim:

A new and distinct nectarine tree, substantially as shown and described herein.